



NYSCAP Cattle Welfare Certification Program



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NYS Cattle Health Assurance Program



Topics for today

- ➔ NYS Cattle Health Assurance Program (NYSCAP)
- ➔ NYSCAP Cattle Welfare Certification Program
- ➔ Cattle Care Protocol Module



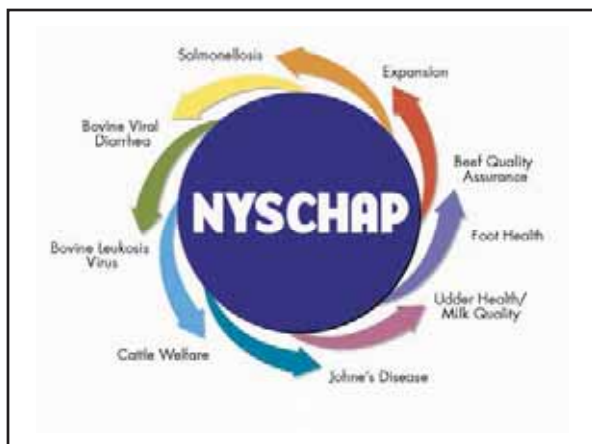
Why participate?

- ➔ #1 reason - reinforce or improve the level of care for animals
- ➔ Documentation of protocols for all personnel, new hires, temps, etc
- ➔ Validate for consumers the level of care on the dairy



Welfare Certification: Requirements for producer

- ➔ Enrollment in NYSCAP core module
- ➔ SOPs
- ➔ Training of employees
- ➔ Veterinary oversight



NYSCAP Requirements

- ➔ Unique, individual animal identification
- ➔ Treatment records
- ➔ VCPR





Herd plan based on information collected and team discussion

- ➔ Goals
- ➔ ID
- ➔ Treatment records
- ➔ Incoming animals
- ➔ Milk production/quality
- ➔ Vaccination program
- ➔ Employee management

- ➔ Calving pen management
- ➔ Calf health
- ➔ Weaned heifer health
- ➔ Transition cows
- ➔ Repro
- ➔ Lameness
- ➔ culling
- ➔ Infectious disease
- ➔ Johne's disease

NYSCAP Herd Plan

Farm: _____ Date: 8/17/07

Intervention Tests	Period Response	Frequency, duration or completion goal	Quarterly assessment of progress (to be started by veterinarian)
Mastitis - a herd assessment of mastitis: To have 8 out of 10 samples are negative in bulk tank milk and to prevent the herd from going above 100,000 CFU/ml. Dr. Johnson will do bulk tank milk and make any necessary changes.		Quarterly and then monthly	
Quarterly Bulk Tank Milk (BTM) testing: <ul style="list-style-type: none"> • Consult with mastitis specialist (Dr. Johnson) • Consult with management decisions with change bulk tank milk • Monitor bulk tank milk and consult with Dr. Johnson • Test samples to identify clinical mastitis cases • Periodically test Dr. Johnson to obtain necessary samples with Dr. Johnson 		Quarterly and then monthly	
Control mastitis: <ul style="list-style-type: none"> • Work closely with mastitis specialist to reduce mastitis • Work with mastitis specialist to reduce mastitis • Work with mastitis specialist to reduce mastitis • Consider purchasing a mastitis specialist for mastitis 		Quarterly	
Quarterly with Dr. Johnson: <ul style="list-style-type: none"> • Review the herd's mastitis plan • Review the herd's mastitis plan • Review the herd's mastitis plan 		Quarterly	

NYSCAP Annual Evaluation

Producer Name: _____

Group Name (if any): _____

Date: 8/17/07

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Notes on NYSCAP

- ➔ Confidential
- ➔ No cost to enroll or participate
- ➔ No testing required
- ➔ Incremental improvement over time
- ➔ Benefits:
 - Discuss all farm issues with veterinary consultation
 - Herd vet provided with voucher for their time
 - Mastitis module – QMPS, bulk tank culture program, 6 cultures \$25 (one culture \$13.75)
 - Johne's testing discounts

NYSCAP Cattle Welfare Certification Program

- ➔ Offered as of December 2006
- ➔ Based on objective measures
- ➔ 5 page reference list

Animal Welfare Module References, Resources and Links

Body Condition
 Williams, RE, Isaac, GM, Wagner, JE, Brown, RL, Trout, RF, Leach, TC. A Dairy Cow Body Condition Scoring System and its Relationship to Selected Production Variables in High Producing Holstein Cattle. *J Dairy Science* (1982) 65:495.
 Ferguson, JD, Colquhoun, DT, Thomson, N. Principal Descriptors of Body Condition Score in Holstein Cows. *J Dairy Science* (1994) 77:2852-2703.
 Body Condition Scoring For Dairy Replacement Heifers: Rache Animal Nutrition and Health, Hoffmann-La Roche Inc. 340 Kingland St, Nutley, NJ 07110-1199. Anne AgriNet. Original source: Edmonson D et al. *J of Dairy Science* 72 (1):1985.
 Ferrus, RA, Barckhauf, HF, Schmidt, MK, Hall, FM. How to score body condition of dairy cows. *Topics in Veterinary Medicine* (Autumn 1991) 33-34.
 Edmonson, AJ, Loe, D, Weaver, LD, Farrow, T, Welton, G. Body Condition Scoring Chart for Holstein Dairy Cows. *J Dairy Sci* (1989) 72 (2):68-78.

Calf Husbandry
 Quigley, JD, Strickland, RE, Kent, CJ, O'Brien, MD. 2001. Formulation of colostrum supplement: colostrum replacement and acquisition of passive immunity in neonatal calves. *J Dairy Sci* 84:2059-2065.
 Stott, GH, Marx, DB, Meserve, BE, Nightingale, GT. 1979. Colostral immunoglobulin transfer in calves: I. Period of absorption. *J Dairy Sci* 62:1452-1458.
 Stott, GH, Faldut, A. 1983. Colostral immunoglobulin absorption linearly related to concentrations in calves. *J Dairy Sci* 66:3218-3228.
 Wallis, SJ, Dugate, DA, Orr, SL. 1996. Factors associated with mortality in 23 days of life in dairy heifers in the United States. *Prevent. Vet. Med.* 29:9-19.
 Meese, M, Tyler, JW, Chiparwa, M, Dawes, M, Middleton, JR. Effect of delayed colostrum selection on colostrum IgG concentration in dairy cows. *JAVMA* (April 15, 2003) 228, 8:1375-1377.
 Memoni, PP, Mehta, DE, Courtable, PD, Bailey, WL, McCoy, GC. 1999. Use of mammary gland and colostrum characteristics to predict colostrum IgG1 concentrations and udder/teat infection in Holstein cows. *JAVMA* 234(12):1817-1823.

Unique to NYSCHAP

- ➔ One time pre-certification visit to determine any deficiencies
- ➔ GOAL – no one fails a certification visit
- ➔ Work through NYSCHAP to meet requirements



Things not witnessed during a welfare audit

- ➔ Extremes in weather
- ➔ Seasonally slippery floors
- ➔ Seasonal hygiene issues
- ➔ Sporadic mistreatment/abuse
- ➔ Health crises – excessive culling/mortality
- ➔ Non-ambulatory cattle
- ➔ Routine elective procedures
- ➔ Treatment administration
- ➔ Other

SOP Development Worksheet

SOP Name: Euthanasia Protocol with Compromise		
SOP Number:	Date Written: 3/15/05	
Written By:	Date Implemented:	
OK: Barbara Thompson	Date Last Revised:	
Task Description: Euthanize animal		
Location work is done:	Number of people required: 2	
All location of animal: Calf level. 1 worker trained in euthanasia with gun 1 worker with animal restraint skills.		
Equipment & supplies required:		
<ul style="list-style-type: none"> Appropriate caliber gun antiseptic for size of animal (see euthanasia chart) Holder appropriate for size of animal Play to guidelines – only available designated individuals Unwashed, sharp knives in some circumstances 		
Personal protective & safety equipment required:		
<ul style="list-style-type: none"> Safety glasses Hearing protection Gun trigger lock 		
Objective, finished product or result expected:		
Humanely destroyed animals		
Scope of this SOP: euthanize any age animal		
Operations covered:	Workers covered:	Locations covered:
Restraint & euthanasia	Designated & trained workers Names _____ Animal handlers for restraint only	All animals facilities on this farm

Required SOPs

- ➔ Identification of sick/injured cattle
- ➔ Non-ambulatory cattle
- ➔ Euthanasia
- ➔ Hospital cattle – treatment protocols
- ➔ Newborn Calves
- ➔ Lameness
- ➔ Routine/Elective Surgical Procedures
- ➔ Emergency Management plan
- ➔ Heifer Raiser Contract

Creating an SOP

- ➔ Think of a recipe:
 - Needs to be precise
 - Depending on task include:
 - ➔ Equipment
 - ➔ Number of people
 - ➔ Contact information for certain individuals
 - Does not need to be longwinded! Bulleted works well
- ➔ Include personnel input
- ➔ Has to reflect how the 'task' must be performed



Assistance with SOPs

- ➔ Veterinarian – most important is treatment protocols
- ➔ Use NYSCAP specific SOP templates
- ➔ Pro-Dairy SOP blank template
- ➔ CCE educators
- ➔ Consultants
- ➔ Student/intern
- ➔ Borrow from other farms – edit to fit your farm



Cattle Handling

- ➔ Consequences for acts of neglect, mistreatment or abuse
- ➔ Movement of cattle in calm, quiet manner
- ➔ Correct use of restraint equipment and crowd gates
- ➔ Prods – only to be used in extreme cases



SOP for Identification of Sick/Injured Cattle



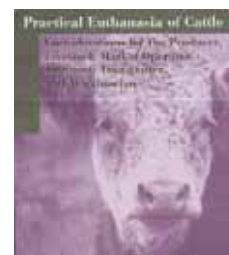
Non-ambulatory cattle

- ➔ Approved method of removal
 - Sled, sling, bucket
 - w/in 2 hours
 - Non-slip floor
 - Feed, water, protection injury & other cattle
 - Protection environmental conditions
- ➔ Specify timeframe for medical intervention



Euthanasia

- ➔ Appropriate procedure for all age groups, per AABP
- ➔ Prompt decision making
- ➔ Identified employee and/or vet
- ➔ Done without moving if safe
- ➔ Do not delay for renderer
- ➔ Done prior to loading on rendering truck





Hospital/Sick Cattle

- Assessment and monitoring
- Guidelines for veterinary involvement.
- Treatment protocols, such as mastitis, ketosis, lameness, calf scours, etc.



Newborn Calves

- Must be fed colostrum w/in 6 hours – heifers and **bulls**
- Bulls calves must be cared for properly while on premises
- Transportation
 - Ensure calves are dry
 - walk and easily stand without assistance



Lameness

- Management system for early detection and effective, prompt treatment
 - Assess facilities, nutrition and employee training
 - Implement management practices to minimize new occurrences



Elective/Routine Surgical Procedures

- Castration, dehorning, teat removal, tail docking
- Performed only by appropriately trained personnel, under acceptably sanitary conditions, in consultation with veterinarian



Emergency Management Plan

- Basically in NY:
 - Do you have a generator? And...
 - Do you know your generator works?
- Consideration for barn fire or flood
 - Human safety
 - Housing of cattle
- Provision for weather emergency
- Emergency contact list




NYSCAP Cattle Welfare Certification Program Custom Heifer Raiser Contract	
I verify that this custom heifer raising facility meets the following requirements for the heifers owned by _____	
<input checked="" type="checkbox"/>	Valid veterinarian-client-patient relationship with Dr. _____
<input checked="" type="checkbox"/>	Heifers are transported in safe vehicles that protect from extreme weather conditions.
<input checked="" type="checkbox"/>	All heifers have continual access to clean water and feed.
<input checked="" type="checkbox"/>	All heifers are assessed daily for sickness and injury. Those deemed to need intervention are cared for based on written treatment protocols.
<input checked="" type="checkbox"/>	Non-ambulatory heifers are moved by appropriate sliding devices. Only when necessary, heifers are dropped less than 10 feet onto the device. Non-ambulatory heifers are moved off concrete within two hours and housed in an area where they can rest themselves, are protected from environmental elements and have free access to feed and water.
<input checked="" type="checkbox"/>	Only trained personnel euthanize heifers according to a written protocol.
<input checked="" type="checkbox"/>	I heifer body condition scores, clean hinds and locomotion scores confirm that the facilities meet the needs of the heifers.
<input checked="" type="checkbox"/>	Heifers are moved in a calm, quiet manner through facilities that do not cause injury. Ponds are used only in extreme situations when heifer health or human safety is at stake.
<input checked="" type="checkbox"/>	Routine and elective surgeries such as dehorning, teat removal and tail docking are performed by trained personnel under the guidance of a veterinarian.
Heifer Raiser Name: _____	
Heifer Raiser Signature: _____	Date: _____
Heifer Raiser Veterinarian Name: _____	
Heifer Raiser Veterinarian Signature: _____	Date: _____
Owner Name: _____	
Owner Signature: _____	Date: _____



Oversight by herd veterinarian





Employee Training Prior to Certification Visit

62 Areas SOPs

Date	Employee Name	Job Description	SOPs Reviewed	Signature - Employee and Manager
3/27/08	Nate Hodge	Animal Manager/ Equipment operator	Cattle handling & Non-Amputatory cattle	Nate Hodge
3/27/08	Shane Wilson	Feeder/ Equipment Operator	Cattle handling & Non-Amputatory cattle	Shane Wilson
3/27/08	Gabriel Corballo	Post Birthperson	Cattle handling Non-Amputatory cattle	Gabriel Corballo
3/27/08	Frederico Corballo	Youngstock Mgr	Cattle handling Non-Amputatory cattle	Frederico Corballo
3/27/08	Armando Corballo	Equipment Operator/ Feeder	Cattle handling Non-Amputatory cattle	Armando Corballo
3/27/08	Israel Maldonado	Feeder/ Operator	Cattle handling Non-Amputatory cattle	Israel Maldonado
3/27/08	Marvin Halstead	Milker/ Equipment operator	Cattle handling Non-Amputatory cattle	Marvin Halstead



Certification Visit

- Verify:
 - Herd Veterinarian – VCPR, SOPs, culling & mortality record
 - Access to SOPs
- Training record
- Third party assessment of farm – state or university veterinarian






Facilities & Environment Inspection


- Specific areas – hospital and non-amputatory area
- Maintain in good repair to avoid discomfort/distress/injury
- Protection from elements
- Appropriate handling/restraint facilities






Does housing meet the needs of cattle?

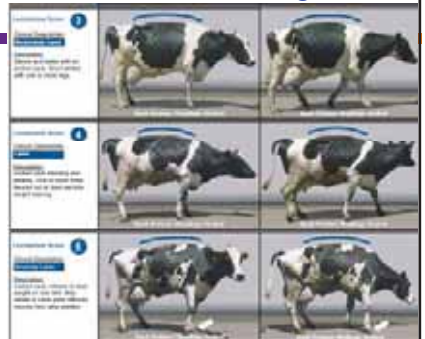
- Housing circumstances that affect cattle will be captured by BCS, hygiene scores and locomotion scores






Locomotion Scoring

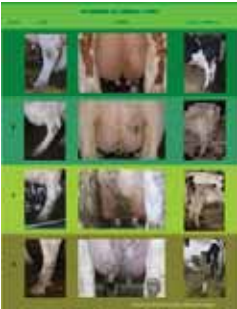
No more than 15% >2 in each animal group






Hygiene Scores - Cows

	Legs	Flank	Udder
Tie stall	75% <3	80% <3	70% <3
Loose Housing	40% <3	80% <3	80% <3



➡ For herds with a yearly average SCC <250,000 lower legs will not be scored

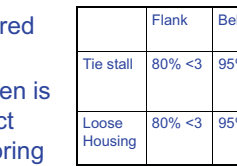



Hygiene Scores - Heifers

➡ Flanks are scored as cows


➡ Ventral abdomen is scored to reflect manure on flooring and in stalls

	Flank	Belly
Tie stall	80% <3	95% <4
Loose Housing	80% <3	95% <4






Reneau, JAVMA, vol. 227, # 8



BCS

➡ Upon certification – 90% of herd ≥ 2

➡ Yearlings and older





Re-certification

➡ Within 10-14 months of enrollment

➡ Same process at certification

- SOPs
- Training records
- Assess all animals





PAACO review pending....




➡ Professional Animal Auditors Certification Organization

- American Assoc. of Avian Pathologists
- American Assoc. of Bovine Practitioners
- American Assoc. of Swine Veterinarians
- American Registry of Professional Animal Scientists
- Federation of Animal Science Societies

➡ National Dairy Animal Well-being Initiative

➡ Certification by 3 panel review team



Cattle Care Protocol Module

➡ Any farm in NYS

- Non-NYSCHAP
 - Must work with NYS Department of Agriculture and Markets (NYSDAM) field veterinarians
- NYSCHAP farms – can work with state NYSCHAP vet or private NYSCHAP certified vet



Eligibility

- ➔ Proper and judicious use of animal health products:
 - Valid veterinarian-client-patient relationship (VCPR) must be in place and is defined as:
 - ➔ The licensed veterinarian has assumed clinical responsibility for the animals and the owner of the animals has agreed to follow the veterinarian's instructions
 - ➔ The veterinarian has sufficient direct knowledge of the animals condition and their care
 - ➔ The veterinarian is available for follow-up evaluation
 - Animal health products are used in compliance with the PMO and AMDUCA.
- ➔ Unique individual identification is used for all animals
- ➔ Treatments are recorded for any product with a withdrawal
- ➔ Treatment records are maintained for 2 years



Process

- ➔ Written standard operating procedures
 - Reviewed by herd veterinarian
 - Reviewed by state field vet and/or NYSCHAP vet
- ➔ Personnel training
 - Language appropriate
 - Documentation
- ➔ Herd veterinarian
 - Valid VCPR
 - Review of culling and mortality records

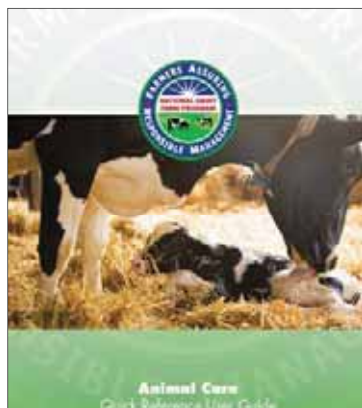


Certificate of Participation

- ➔ Upon completion from NYS Dept. Agriculture Markets, includes validation period
- ➔ Review within 10-14 months
 - Update any SOPs as needed, review by herd vet
 - Herd vet reviews culling and mortality records
 - Documentation of training
 - ➔ All personnel
 - ➔ Those hired in between reviews, documentation of training upon hire



Google NYSCHAP



got questions?



NYSCHAP Cattle Welfare Certification Module Outline:

Participation – Farms enrolled in the core module of NYSCHAP will be able to participate in the Cattle Welfare Certification Module when they meet the standards for the issues addressed below.

Enrollment – Farms must meet all standards for the issues addressed for enrollment into the cattle welfare module. Prior to the certification visit producers may request one pre-certification visit to determine areas of deficiencies.

Prior to a certification or re-certification visit all SOPs will be reviewed and edited by the certifying veterinarian. A clear plan should be created prior to a visit with farm personnel that will allow assessors to adequately move and evaluate all animals for body condition, hygiene and locomotion. Routine farm tasks, such as milking, footbaths, sorting and cleaning, that require moving animals should be considered. It is not acceptable for assessors to score animals for locomotion in lockups, tie-ups or by walking through crowded pens. On the day of the visit the herd veterinarian will need to be in attendance to discuss the SOPs and culling and mortality records, which must be examined for the 12 months prior to the visit.

Location of SOPs will be inspected to insure that all employees have access to them. Copies of employee training of SOPs will be collected at any certification or re-certification visit.

Annual Recertification – Upon recertification farms must meet all standards for the issues addressed in the cattle welfare module. Recertification must occur within 10-14 months of enrollment anniversary date to remain active. For farms that can not meet standards upon annual recertification due to extenuating circumstances the recertification period can be extended up to 60 days; a second 60 day extension can be granted if initial problem has been addressed and improvement is in progress. Any extension for recertification must be documented and submitted to the NYSCHAP coordinator.

Standard Operating Procedures (SOPs) – Farm specific SOPs that are reviewed by the herd veterinarian will be in place for specified cattle welfare contingencies (see categories to follow). These SOPs will be posted or filed where they will be accessible to employees. Employees will review SOPs at least once per year. Generalized SOPs for many of the issue areas are available in MS Word format on the NYSCHAP website at <http://www.nyschap.vet.cornell.edu/module/welfare/welfare.asp>. These may be edited to meet operation specifics. Contact Kathy Finnerty for a CD of the SOPs (607-253-3910).

Farms participating in the welfare module will have a clear understanding of basic cattle husbandry and care outlined in their NYSCHAP herd plan. The veterinarian-client-patient-relationship (VCPR) is established to allow certain decisions to be made under veterinary guidance and supervision; other decisions should be made only by the veterinarian. It is recommended that written SOPs (e.g. fresh cow monitoring, mastitis treatment flow-chart, disaster preparedness, proper disposal of dead animals) be established for employee training and implementation of standard practices. Adherence to these protocols should help to promote animal health and avoid many potential breaches in cattle welfare. The herd veterinarian and SOPs must be available during the certification visit.

SOPs are required for identification of sick/injured cattle; care of non-ambulatory cattle; AABP Practical Euthanasia (provided by NYSCHAP certifier); euthanasia action plan for all ages of cattle; hospital animals; newborn calves; lameness; routine/elective surgical procedures; and emergency management. Any farm using a heifer raiser must have a Heifer Raiser Contract signed and available at the certification visit.

Employee Training – Employees involved in cattle care and handling will be trained in SOPs specific to their job duties at the time of employment. New employees must be evaluated at least twice during the first year of employment (Garry, 2004). Training records must be available at the certification visit.

Identification of Sick or Injured Cattle – Designated employees are trained in the assessment of cattle for identification of sick and/or injured animals. Cattle are assessed on a daily basis and sick or injured cattle are separated/segregated to an appropriate area for effective, prompt treatment or euthanasia decision. SOPs for assessment should include but not be limited to change in behavior, change in activity, change in appetite, change in appearance (eg body fill, udder fill, droopy ears, hair coat, breathing rate or effort), change in attitude (eg lethargy), presence of abnormal discharge, change in manure consistency, change in gait, and other monitoring efforts such as change in production, body temperature, ketosis strip, and change in milk consistency.

Non-ambulatory cattle – The SOP must include provision for prompt removal, no longer than 2 hours after discovery, from concrete to a safe, well-bedded area that provides adequate footing, provision of feed and water without competition from other cattle; protection from self injury and injury from other cattle; and protection from environmental elements. (Cox, McGrath, Jorgensen, Am J Vet Res, Vol 43, 1982; Garry, 2004; Smith 2002)

A timeframe must be specified in the SOP for providing medical intervention, veterinary consultation when necessary, and timely euthanasia decisions.

Transporting or moving cattle that are non-ambulatory:

1. For distances over 10 feet – cattle are moved by use of appropriate sledding device, sling or bucket. Cattle are moved onto these devices with as little discomfort as possible. If necessary, cattle should be humanely euthanized before transport.
2. Dragging is acceptable ONLY when unavoidable and for distances less than 10 feet. Plenty of bedding must be used.

Culling:

A culling plan will decrease the occurrence of non-ambulatory cattle. The culling plan will have a drug residue avoidance plan to include assessment of realistic likelihood of recovery prior to administering drugs with withdrawal times.

Euthanasia

1. Decision making to be based upon:
 - a. Pain and distress of the cattle
 - b. Likelihood of recovery
 - c. Ability to get to feed and water
 - d. Medications used on the cattle
 - e. Drug withdrawal time
 - f. Diagnostic information
 - g. Condemnation potential
 - h. Economics
2. Approved methods and protocols should be adhered to as outlined in 'Practical Euthanasia of Cattle' produced by AABP (American Association of Bovine Practitioners), www.aabp.org.

Hospital Cattle – to include all production groups

1. Treatment or euthanasia decisions should be based on monitoring for:
 - a. Recovery potential

- b. Deterioration
 - c. Uncontrollable pain
 - d. Locomotion
 - e. BCS
2. Written protocols should be developed for assessment and routine treatments under supervision and training of a veterinarian. The protocol should include guidelines for when a veterinarian should be called for individual cow care and criteria for culling vs. euthanasia.
 3. Access to feed and water without competition from healthy cows must be provided.
 4. Criteria are in place for supportive care for cull cattle when shipment is necessarily delayed.
 5. It is recommended that hospital cattle be segregated from healthy cattle, including maternity cattle.

Care of Newborn Calves (Garry 2004; Grandin, 2002)

1. Neglect of market calves is unacceptable
2. Heifer and bull calves must be fed appropriate colostrum within 6 hours of birth
3. Provide all calves a clean and dry environment.
4. Provide shelter that is appropriate to environmental conditions (moisture, temperature, wind and sun).
5. Meet the following conditions when transporting calves:
 - a. Ensure that calves are dry.
 - b. Calves will not be transported until they are able to walk and easily stand without assistance, except when transporting to on-site calf housing facilities.
 - c. Protect from extreme temperatures; use a clean and disinfected vehicle in good repair; handle calves gently when loading and unloading; drive to avoid cattle injury
 - d. Ensure that market calves are fed at least every 12 hours prior to transport.

Lameness - A management system for early detection and effective, prompt treatment of lameness should be developed. (Berry, Zinpro, 2001)

1. Assess potential problems including employee training, facilities, nutrition, and infectious disease.
2. Implement management practices to minimize new occurrences (nutrition, trimming, hoof care, environment, etc).
3. No more than 15% of each animal management group has a locomotion score of 3, 4 or 5.

Hygiene

1. Cattle should be maintained in facilities which contribute to clean and dry hair coats and udders.
2. Hygiene scoring can be used to evaluate facility design, stocking rate and maintenance (Cook, 2002, Reneau, 2005).
3. Goal is to minimize the occurrence of hygiene scores greater than 3. Lower leg hygiene scores will be more variable in loose housing depending upon the type of bedding and the means of cleaning the pens.

Cows must meet the following standards:

Score all cows in each cow management group.			
Tie stall:		Loose housing:	
○ Lower leg	75% <3	○ Lower leg	40% <3
○ Udder	80% <3	○ Udder	80% <3
○ Flank & upper leg	70% <3	○ Flank & upper leg	80% <3

Cows in loose housing that have less than 40% lower leg scores of 1 and 2 must have an average SCC of 250,000 for the previous 12 months to be certified

Heifers must meet the following requirements;

Score all heifers in each heifer management group.			
Tie stall:		Loose housing:	
○ Flank & upper leg	70% <3	○ Flank & upper leg	80% <3
○ Ventral abdomen	95% <4	○ Ventral abdomen	95% <4

Hygiene scoring heifers for abdomen and flank scores will reflect stocking rates, amount of manure splash occurring during heifer movement through the facility and cleanliness of the stalls. Although there are no published percentages for ventral abdomen scoring, a paper published by Reneau (2005) reported 9 dairy herds with average abdomen scoring below 3. Until published percentages for scoring abdomen over 3 the 5% mark will be used to reflect those heifers that may choose to lie in the alley even though stalls might be available.

Body Condition Score-(Braun, et. al, The Bovine Proceedings, April 1987; Robert Patton, Topics in Veterinary Medicine, Autumn 1991; Temple Grandin – www.grandin.com

1. All cattle must receive a wholesome daily diet which is nutritionally adequate
2. All cattle must have continual access to adequate supply of clean water
3. Upon certification each animal management group of animals over 12 months of age must have 90% of the group with body condition scores >1.

Facilities and Environment

1. Maintain all facilities in good repair to avoid discomfort, distress and injury
2. Housing circumstances, including overcrowding, that affects cattle welfare will be captured by/increased lameness scores, poor hygiene scores, and wide ranges of BCS due to inadequate access to feed and water.
3. Provide shelter from elements appropriate to weather conditions.
4. Provide and maintain non-slip flooring in cow traffic areas that prevent cows from falling.
5. Use handling and restraint facilities appropriate for management procedures.

Cattle Movement and Handling

1. Management will not tolerate any acts of abuse or mistreatment. Consequences for such action are clearly described to all farm personnel. Written documentation of consequences is recommended.
2. SOPs are recommended for farms that have employees routinely trained in cattle movement and handling.
3. Employees should have training regarding cattle behavior, flight zones and proper use of all cattle handling equipment (Grandin, 2002). Employees should be regularly evaluated when moving cattle.
4. Cattle should be moved in a calm, quiet and careful manner.
5. Facilities should be appropriate for handling. Lighting, shadows, non-slip floors, gates and corrals can affect movement of cattle. Evaluate facilities for objects that can create hazards to cattle moving throughout the farm.
6. Prods, canes and other extreme methods are rarely necessary for routine movement. These devices should be used only when the situation is critical to the cattle's health and well-being and/or human safety.
7. When present, crowd gates should be designed and used to allow for normal cow response and movement. Employees should be trained to properly use crowd gates.

Routine/Elective Surgical Procedures – including dehorning, castration, teat removal and tail docking

1. Elective surgical procedures should only be performed by appropriately trained personnel, under acceptable sanitary conditions, in consultation with a veterinarian. Procedures should be done with appropriate use of anesthetic and/or analgesic.
2. In all cases, these procedures should be performed on appropriately aged cattle:
 - a. Castration
 - i. Closed castration of bull calves should be performed before two months of age
 - ii. Older bulls or open castration procedures should be performed with the use of anesthetic/analgesic in consultation with a veterinarian.
 - b. Dehorning
 - i. Procedure for dairy calves should be performed before two months of age.
 - ii. Beef calves should be dehorned at the earliest time of detection, no later than weaning.
 - iii. The use of anesthesia/sedation/analgesia is recommended for all ages.
 - c. Teat Removal – perform removal at youngest age that supernumerary teats can be identified
 - d. Tail docking may be a routine management decision and must be appropriately done in consultation with a veterinarian.

Emergency Management Plan

1. Emergency phone contact list – farm must post by each phone at the facility, or program into cell phones used by farm workers, an emergency phone contact list including phone numbers for the herd veterinarian, renderer, cattle hauler, fire department, police, and ambulance.
2. Farm emergency phone contact list must be posted or programmed with the emergency phone contact list and must include the phone numbers for farm owners, managers, etc. to be contacted in an emergency
3. SOP – must include provisions for providing basic needs for animals including, water, feed, manure removal, bedding, ventilation and milking in case of power outage. The SOP should include a schedule for maintaining and testing alternate power source. SOPs should include provisions for dealing with fires, human medical emergencies and emergencies due to severe weather conditions. In preparation for emergency situations which may threaten human health or safety, such as mandatory evacuations due to severe weather or environmental hazards, it may be necessary to provide access to extra feed, water, or pasture and then evacuate animal care personnel. In such cases, the emergency plan should include how workers will communicate to determine safe return to the facility to care for animal needs.

Heifer Raiser Contract – if a farm uses an off-site heifer raiser a contract must be in signed and available at the certification visit.

NYSCHAP Cattle Care Protocol Module:

Eligible farms:

1. Any farm in NYS can participate in the module. If the farm is not enrolled in NYSCHAP, the farm must work with the NYS Department of Agriculture and Markets field veterinarian.
2. If the farm is already enrolled in NYSCHAP, the farm may enroll in the program with the assistance of the NYSCHAP veterinarian (NYSDAM field veterinarian or NYSCHAP certified veterinarian).
3. A certificate of participation will be issued by the NYSDAM Division of Animal Industry after the signed enrollment form and training documentation is submitted to the NYSCHAP program manager.
4. Annual review within 10-14 months is necessary and will include review and update of protocols and personnel training.

The following requirements must be met:

1. Proper and judicious use of animal health products
 - a. Valid veterinarian-client-patient relationship (VCPR) must be in place and is defined as:
 - i. The licensed veterinarian has assumed clinical responsibility for the animals and the owner of the animals has agreed to follow the veterinarian's instructions
 - ii. The veterinarian has sufficient direct knowledge of the animals condition and their care
 - iii. The veterinarian is available for follow-up evaluation
 - b. Animal health products are used in compliance with the PMO and AMDUCA.
2. Unique individual identification is used for all animals; administration of all animal health products having a withdrawal are documented; and treatment records are retained for a minimum of two years.
3. Creation of written standard operating procedures (SOPs). All SOPs must be reviewed by the herd veterinarian. SOPs must be located in an area where all personnel have access.
4. Training of all personnel that work within the cattle care protocols. Personnel must be trained through written or oral means in a language they understand. Documentation of training is required.
5. Herd veterinarian will review culling and mortality records for the year prior to enrollment or annual review to determine any welfare issues.
6. All new employees hired between annual reviews must be trained within the protocols pertinent to their job duties.

SOPs required:

Proper movement and handling of cattle

1. Management will not tolerate any acts of abuse or mistreatment defined as 'tortures or cruelly beats or unjustifiably injures, maims, mutilates or kills any animal' (NYSDAM Law Article 26). Consequences for such action are clearly described to all farm personnel. Written documentation of consequences is required.
2. Cattle should be moved in a calm, quiet and careful manner.
3. Prods, canes and other extreme methods are rarely necessary for routine movement. These devices should be used only when the situation is critical to the cattle's health and well-being and/or human safety.

4. When present, crowd gates should be designed and used to allow for normal cow response and movement. Employees should be trained to properly use crowd gates.

Identification of Sick or Injured Cattle

Designated employees are trained in the assessment of cattle for identification of sick and/or injured animals. Cattle are assessed on a daily basis and sick or injured cattle are separated/segregated to an appropriate area for effective, prompt treatment or euthanasia decision. SOPs for assessment should include but not be limited to change in behavior, change in activity, change in appetite, change in appearance (eg body fill, udder fill, droopy ears, hair coat, breathing rate or effort), change in attitude (eg lethargy), presence of abnormal discharge, change in manure consistency, change in gait, and other monitoring efforts such as change in production, body temperature, ketosis strip, and change in milk consistency. Specific identification for lame cattle must be outlined in the SOP.

Care and transport of non-ambulatory

The SOP must include provision for prompt removal, no longer than 2 hours after discovery, from concrete to a safe, well-bedded area that provides adequate footing, provision of feed and water without competition from other cattle; protection from self injury and injury from other cattle; and protection from environmental elements. (Cox, McGrath, Jorgensen, Am J Vet Res, Vol 43, 1982; Garry, 2004; Smith 2002)

A timeframe must be specified in the SOP for providing medical intervention, veterinary consultation when necessary, and timely euthanasia decisions.

Transporting or moving cattle that are non-ambulatory:

1. For distances over 10 feet – cattle are moved by use of appropriate sledding device, sling or bucket. Cattle are moved onto these devices with as little discomfort as possible. If necessary, cattle should be humanely euthanized before transport.
2. Dragging is acceptable ONLY when unavoidable and for distances less than 10 feet. Limbs must be padded and plenty of bedding must be used to prevent further injury.

Treatment, Culling and euthanasia decisions:

These decisions may be covered in SOPs for hospital/sick cattle and euthanasia. A culling plan will decrease the occurrence of non-ambulatory cattle. The culling plan will have a drug residue avoidance plan to include assessment of realistic likelihood of recovery prior to administering drugs with withdrawal times.

1. Treatment, culling or euthanasia decisions should be based on monitoring for:
 - a. Recovery potential
 - b. Deterioration
 - c. Uncontrollable pain
 - d. Locomotion
 - e. BCS

Euthanasia

If farm management, staff, or the herd veterinarian determines that an animal should be euthanized, euthanasia should be immediate and take place without moving the animal, unless the safety of farm workers or other animals is threatened. Euthanasia should not be delayed to wait for a renderer to arrive at the farm. A plan must be in place to euthanize the animal as soon as possible to alleviate suffering. Cattle must be euthanized prior to being loaded on a rendering truck.

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1. Decision making to be based upon:
 - a. Pain and distress of the cattle
 - b. Likelihood of recovery
 - c. Ability to get to feed and water
 - d. Medications used on the cattle
 - e. Drug withdrawal time
 - f. Diagnostic information
 - g. Condemnation potential
 - h. Economics
2. Approved methods and protocols must be adhered to as outlined in 'Practical Euthanasia of Cattle' produced by AABP (American Association of Bovine Practitioners), www.aabp.org. Approved methods include gunshot, captive bolt or administration of barbiturates by a veterinarian.

Hospital/sick cattle

1. Treatment or euthanasia decisions should be based on monitoring for:
 - a. Recovery potential
 - b. Deterioration
 - c. Uncontrollable pain
 - d. Locomotion
 - e. BCS
2. Written protocols should be developed for assessment and routine treatments under supervision and training of a veterinarian. The protocol should include guidelines for when a veterinarian should be called for individual cow care and criteria for culling vs. euthanasia.
3. Access to feed and water without competition from healthy cows must be provided.
4. Criteria are in place for supportive care for cull cattle when shipment is necessarily delayed.
5. It is recommended that hospital cattle be segregated from healthy cattle, including maternity cattle.

Routine/elective surgical procedures: (written SOP and documentation of veterinary personnel training required)

1. Elective surgical procedures should only be performed by appropriately trained personnel, under acceptable sanitary conditions, in consultation with a veterinarian.
2. In all cases, these procedures should be performed on appropriately aged cattle:
 - a. Castration - Closed castration of bull calves should be performed before two months of age. Older bulls or open castration procedures should be performed with the use of anesthetic/analgesic in consultation with a veterinarian.
 - b. Dehorn before eight weeks of age using dehorning paste, thermal cautery, or by gouging technique. Dehorning paste or thermal cautery are the preferred methods to reduce risk of spreading diseases such as Bovine leukosis virus or bovine viral diarrhea. Preferred age for dehorning is two to four weeks and must be performed before eight weeks of age. Caustic pastes should not be used after two months of age. Cornual nerve block with lidocaine should be used with all dehorning procedures. When performing dehorning, use a restraint method that decreases the animal's mobility to prevent injuries to animals and farm personnel.
 - c. Tail docking may be a routine management decision and must be appropriately done in consultation with a veterinarian. Use of elastrator band or cautery tail docker is recommended to remove tails in calves less than 30 days. Use of an epidural is not recommended in calves less than 30 days old. Tail length should extend a hand's width

below the vulva. Some farmers may choose to dock tails at an older age because of management systems such as pasturing. Tail docking of animals older than one month by cutting requires use of anesthesia with lidocaine. Tail banding is an approved method of docking at any age without an epidural. When performing tail docking, use a restraint method that decreases the animal's mobility to prevent injuries to the animal and workers.

- d. Teat Removal – perform removal at youngest age that supernumerary teats can be identified.

Care of newborn calves

1. Neglect of market calves is unacceptable
2. Heifer and bull calves must be fed appropriate colostrum within 6 hours of birth
3. Provide all calves a clean and dry environment.
4. Provide shelter that is appropriate to environmental conditions (moisture, temperature, wind and sun).
5. Meet the following conditions when transporting calves:
 - a. Ensure that market calves are fed at least every 12 hours prior to transport.
 - b. Ensure that calves are dry prior to transport
 - c. Calves will not be transported until they are able to walk and easily stand without assistance, except when transporting to on-site calf housing facilities.
 - d. Protect from extreme temperatures; use a clean and disinfected vehicle in good repair; handle calves gently when loading and unloading; drive to avoid cattle injury

Emergency Management Plan

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